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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/053,182	01/16/2002	Mano Shaarpour	HALB:031	2848

7590 04/25/2005

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EXAMINER

KRECK, JOHN J

ART UNIT	PAPER NUMBER
3673	

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/053,182

Applicant(s)

SHAARPOUR, MANO

Examiner

John Kreck

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/17/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/17/05 has been entered.

Claims 1-24 and 26 are pending.

1. Claims 1-13 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 14 calls for "a syneristic blend". Applicant has failed to define what range of concentrations is encompassed by "synergistic".

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 14-19, 21-24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zaleski, et al. (U.S. Patent number 5,826,669) in view of Diamond Seal TM.

Zaleski teaches the treating a wellbore with a fluid including a carbon based material to prevent or alleviate lost circulation. Zaleski teaches the material used without reinforcing materials (col. 9, line 22 "used alone"). Zaleski fails to teach the polymer.

Diamond Seal TM is a water swellable but not water soluble crystalline synthetic polymer, disclosed as useful in preventing lost circulation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Zaleski process to have included a water swellable but not water soluble crystalline synthetic polymer as called for in claim 14. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

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Regarding independent claim 15:

Zaleski teaches the adding a fluid including a carbon based additive; circulating; and allowing the additive to enter a lost circulation zone. Zaleski fails to teach the polymer.

Diamond Seal™ is a water swellable but not water soluble crystalline synthetic polymer, disclosed as useful in preventing lost circulation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the Zaleski process to have included a water swellable but not water soluble crystalline synthetic polymer as called for in claim 15. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Zaleski teaches the graphite and ungraphitized particles as called for in claim 16.

DiamondSeal™ includes polyacrylamide as called for in claim 17.

Regarding independent claim 18:

Zaleski teaches the introducing a composition including a resilient carbon based material having graphite and ungraphitized particles; and allowing the additive to enter a lost circulation zone. Zaleski fails to teach the polymer.

Diamond Seal™ is a water swellable but not water soluble crystalline polyacrylamide polymer, disclosed as useful in preventing lost circulation. It would have

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been obvious to one of ordinary skill in the art at the time of the invention to have modified the Zaleski process to have included a water swellable but not water soluble crystalline polyacrylamide polymer as called for in claim 18. It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980).

Regarding claim 19; although the Diamond Seal™ document fails to disclose the crosslinked polymer, the polyacrylamide sold as Diamond Seal™ is crosslinked.

With regards to claim 21; Official Notice is taken that the use of weighting material is well-known and near universal in drilling fluids, in order to achieve proper density. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the zaleski process to have included weighting material as called for in claim 21, in order to achieve proper density.

With regards to claim 22; it would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Zaleski process to have the carbon based material in 70-90 lb/bbl and polymer about 2-10 lb/bbl; through routine experimentation. It is also noted that Zaleski teaches about 30-120 lb/bbl (e.g. claim 5) and Diamond Seal™ teaches about 1-2 lb/bbl (2-4 10 lb. Pails per 100 gallons is approximately 10-20 lb/bbl ***note that the previous office action erroneously

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indicated 2-4 lb/100gal***). Addition of 30-120 lb carbon based material and 10-20 lb polymer, overlaps the claimed range of 70-90 lb/bbl and 2-10 lb/bbl

With regards to claim 23; Zaleski fails to disclose whether the process is used in a vertical or horizontal or directional well. Lost circulation is known to occur in horizontal or directional wells (as taught by the DiamondSeal™ reference). It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Zaleski process (as modified) in a horizontal or directional well, in order to treat lost circulation in such a well.

With regards to claim 24; Zaleski fails to teach the temperature of the well. Official Notice is taken that wells often have temperature of less than 200°F; and that such wells can experience lost circulation. It would have been obvious to one of ordinary skill in the art at the time of the invention to have practiced the Zaleski process (as modified) in a well with a temperature less than 200°F, in order to treat lost circulation in such a well.

With regards to claim 26: Zaleski teaches the additive used without bentonite or reinforcing materials (col. 9, line 22 "used alone").

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Zaleski and DiamondSeal™ as applied to claim 18 above, and further in view of Christman (U.S. Patent number 3,633,689).

Zaleski and DiamondSeal™ fail to teach the alcohol.

Christman teaches the use of alcohol in drilling fluid, to prevent freezing in cold climates. It would have been obvious to one of ordinary skill in the art at the time of the invention to have further modified the Zaleski process to have included alcohol, in order to prevent freezing.

Response to Arguments

6. Applicant's arguments filed 3/17/05 have been fully considered but they are not persuasive.

7. It is again noted that applicant has asserted that the combinations disclosed in table I reflect a "synergy". In particular, applicant has argued that one skilled in the art would have observed unexpected results in the fact that the materials are capable of alleviating lost circulation without reinforcing fibers or materials. This is not found persuasive: it is noted that the Diamond Seal™ reference does not disclose any added material or fibers. Furthermore, applicant's assertion that Zaleski assumes the use of bentonite in the fluid are speculative at best: see e.g. col. 6, lines 35-64:, and compare the results in table 3: if Zaleski "assumes" the use of bentonite; how are the results of the "BLANK" run explained.

8. Applicant has reiterated the argument that the test data disclosed in table 1 shows to one skilled in the art that the performance of the combination is better than additive and thus represents unexpected success. Applicant's assertion that one skilled in the art would expect an additive result between the individual results is not persuasive. Because the materials are used to reduce flow, a result between the two is


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not what one skilled in the art would expect. The lost circulation materials are known to those skilled in the art to reduce filtrate by providing resistance to flow or blocking flow. One skilled in the art would expect the cumulative resistance to flow to be greater than each of the two individually; and therefore the filtrate observed through the cumulative resistance would be less than observed through the individual resistances. The evidence in the table is lacking sufficient data to evaluate the claim to synergistic results.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kreck whose telephone number is 571-272-7042. The examiner can normally be reached on M-F 5:30 am - 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 571-272-7049. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-4177.


JOHN KRECK
PRIMARY EXAMINER
John Kreck
Primary Examiner
Art Unit 3673

21 April 2005